

## OPEN LETTERS.

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### Spores of *Pilobolus*.

At the Buffalo meeting of the Botanical Club of A. A. A. S., Dr. Farlow spoke of an instance in which *Pilobolus* threw its spore cases a distance of eight feet. I have just observed in a dark stable, not often used, where there is a dirt floor, that these black "specks" are very thick and some of them rise to a perpendicular height of six feet, certainly, and very likely a little higher. I examined some of them and they are not "fly-specks." W. J. BEAL.

*Agricultural College, Michigan.*

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### *Viola tricolor*, var. *arvensis*.

Seeing by the GAZETTE for September that Dr. Gray wishes to know whether *Viola tricolor*, var. *arvensis* is established as a wild plant or not I might say that the above plant has been firmly established in one of our fields for at least ten years, and is steadily spreading itself over the whole farm.

*Woodstock, Ontario.*

THOMAS P. HART.

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### Vegetable substance within animal tissues.

A case of the organization of a vegetable substance within animal tissues reported in the *Revue de Chirurgie*, August, 1886, may be of interest to your readers.

Prof. C. Vaulair, of Liège, was experimenting on the tubo-suture of nerves, using rubber drainage tubes, as decalcified bone was too speedily absorbed.

A tube of gray vulcanized caoutchouc was used,  $1\frac{1}{4}$  metres long,  $\frac{1}{8}$  inch thick, walls  $\frac{3}{50}$  inch thick.

The experiment was successful as regards the regeneration of the nerve. But in  $7\frac{1}{2}$  months it was found the tube was being absorbed, and finally it disappeared. Under the microscope the tube showed a more or less homogeneous parenchyma, and a large number of blood vessels. The stroma formed a compact resisting mass of fine interlaced connective tissue fibers, and cells occupying the interfascicular spaces.

The cells averaged twenty micro-millimeters; some were polygonal, others elongated. The cells had large nuclei. The connective tissue took a bright rose stain in boracic carmine.

The vessels were numerous and of the capillary type; in some the walls were of a continuous layer of elements, flattened and resembling normal vascular endothelium; there were also other types.

The outer surface of the tube was irregular and fungous; the inner surface smooth, and showed no distinct line of demarcation from the subjacent tissues. At its lower part the tube had become assimilated to the surrounding connective tissues, and had finally disappeared.

Your readers will observe that this absorption or rather organization of a structureless vegetable exudate is different from the revivification of catgut, bone sponge, etc., where we have the conversion of one animal tissue into another. But heretofore vegetable substances have not become animalized, as far as known, save through the laboratory of the alimentary system.

Your readers will find a more extensive abstract in the *Medical Record*, October 2, 1886.

*Indianapolis, Ind.*

A. W. BRAYTON.